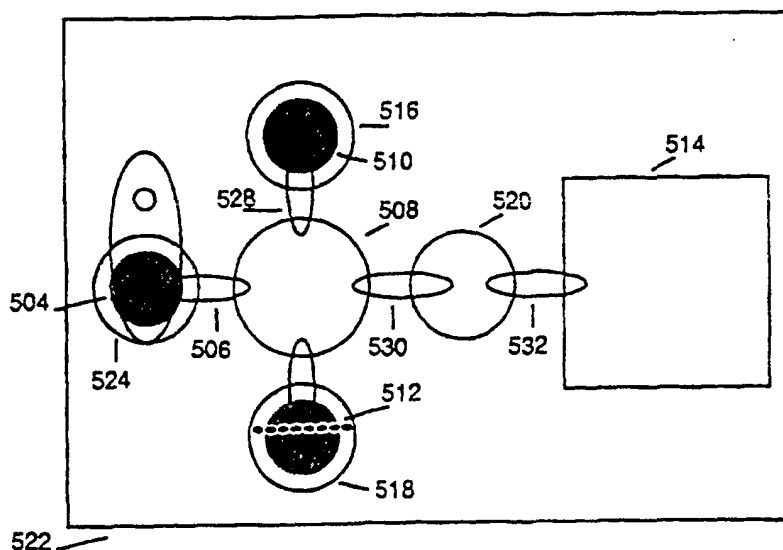




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(54) Title: INTEGRATED NUCLEIC ACID DIAGNOSTIC DEVICE



(57) Abstract

The present invention provides a miniaturized integrated nucleic acid diagnostic device and system (522). The device (522) of the invention is generally capable of performing one or more sample acquisition and preparation operations, in combination with one or more sample analysis operations. For example, the device (522) can integrate several or all of the operations involved in sample acquisition and storage, sample preparation and sample analysis, within a single integrated unit (522). The device (522) is useful in a variety of applications, and most notably, nucleic acid based diagnostic applications and *de novo* sequencing applications.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US96/11147

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : C12P 19/34; C12M 1/40

US CL : 435/91.2, 287.2

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : Please See Extra Sheet.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y ----- A	WO 94/05414 A1 (THE REGENTS OF THE UNIVERSITY OF CALIFORNIA) 17 March 1994 (17.03.94), see entire document.	1-11, 18-74, 84-91 ----- 12-17, 75-83
Y ----- A	US 4,426,451 A (COLUMBUS) 17 January 1984 (17.01.84), see entire document.	1-11, 18-55, 84-91 ----- 12-17, 75-83
Y, P	US 5,498,392 A (WILDING ET AL.) 12 March 1996 (12.03.96), see entire document.	25-28, 36-39, 41, 45-48, 66- 69



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L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

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International application No.

PCT/US96/11147

B. FIELDS SEARCHED

Minimum documentation searched

Classification System: U.S.

435/6, 91.1, 91.2, 286.1, 286.5, 286.6, 286.7, 287.2, 288.5, 288.6, 288.7, 294.1, 297.5, 305.3, 306.1; 436/43, 94, 175, 177, 178, 180; 422/68.1, 80, 81, 100, 101, 102; 935/76-78, 85-88; 137/814, 206, 208, 571; 417/118,121